

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property
Organization
International Bureau



(43) International Publication Date
10 February 2005 (10.02.2005)

PCT

(10) International Publication Number
WO 2005/012263 A1

(51) International Patent Classification⁷: C07D 239/48, 417/12, 401/12, 239/46, 233/88, 409/04, 263/48, 413/10, 249/14, A61K 31/505, 31/506, 31/4168, 31/4178, 31/421, 31/4439

(21) International Application Number:
PCT/GB2004/003184

(22) International Filing Date: 23 July 2004 (23.07.2004)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
0317346.5 24 July 2003 (24.07.2003) GB
60/490,286 28 July 2003 (28.07.2003) US

(71) Applicant (for all designated States except US): PHARMAGENE LABORATORIES LIMITED [GB/GB]; 2 Orchard Road, Royston, Hertfordshire SG8 5HD (GB).

(72) Inventors; and
(75) Inventors/Applicants (for US only): BORMAN, Richard, Anthony [GB/GB]; 45 Huddleston Way, Sawston, Cambridge, Cambridgeshire CB2 4SW (GB). COLEMAN, Robert, Alexander [GB/GB]; 54 London Road, Royston, Hertfordshire SG8 9EL (GB). CLARK, Kenneth, Lyle [GB/GB]; 15 Parsonage Way, Linton, Cambridge, Cambridgeshire CB1 6YL (GB). OXFORD, Alexander, William [GB/GB]; 60 Green Drift, Royston, Hertfordshire SG8 5BX (GB). HYND, George [GB/GB]; c/o Argenta Discovery Limited, 8/9 Spire Green Centre, Flex Meadow, Harlow Essex CM19 5TR (GB). ARCHER,

Janet, Ann [GB/GB]; c/o Argenta Discovery Limited, 8/9 Spire Green Centre, Flex Meadow, Harlow Essex CM18 5TR (GB). ALEY, Amanda [GB/GB]; c/o Argenta Discovery Limited, 8/9 Spire Green Centre, Flex Meadow, Harlow Essex CM19 5TR (GB). HARRIS, Neil, Victor [GB/GB]; c/o Argenta Discovery Limited, 8/9 Spire Green Centre, Flex Meadow, Harlow Essex CM19 5TR (GB).

(74) Agents: WATSON, Robert et al.; Mewburn Ellis LLP, York House, 23 Kingsway, London, Greater London WC2B 6HP (GB).

(81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

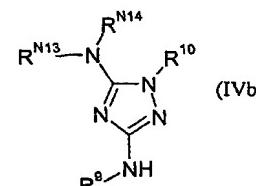
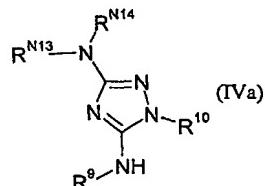
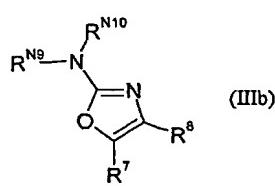
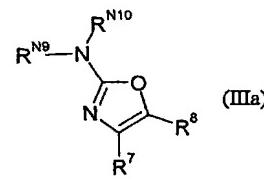
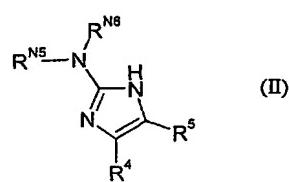
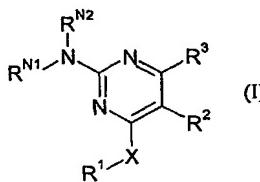
(84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Declaration under Rule 4.17:

— of inventorship (Rule 4.17(iv)) for US only

[Continued on next page]

(54) Title: 5-HT_{2B} RECEPTOR ANTAGONISTS



WO 2005/012263 A1

(57) Abstract: Compounds of formulae: (I), (II), (IIIa), (IIIb), (IVa) and (IVb); or a pharmaceutically acceptable salt thereof, for use as pharmaceuticals, in particular for the treatment of a condition alleviated by antagonism of a 5-HT_{2B} receptor.



Published:

— *with international search report*

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.